



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,994	12/07/2000	Yasumasa Kodama	450100-02879	1585
20999	7590	09/08/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			BOCCIO, VINCENT F	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/731,994

Applicant(s)

KODAMA, YASUMASA

Examiner

Vincent F. Boccio

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment of 6/22/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected. YFB
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2616

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

Response to Arguments

1. Applicant's arguments with respect to amended claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. (US 5,278,838) in view of Baba et al. (US 5,758,057).

Regarding claims 1-10 the examiner incorporates by reference the last action against the claims.

The examiner will address the newly added claim language and arguments together.

Claim 1 has been amended and argued that the combination does not meet or render obvious the newly recited limitations to the claims, which further recite,

"wherein the error is detected based on status data, which includes a status (col. 5, logged errors for data and parity data, drives with data and parity drives or drive)

o of the data and parity data that is returned from the R/R means (the data and parity data are recorded to the

Art Unit: 2616

drives) to one of the plurality of I/O processing means (data paths) and is then added to an error table (see below rebuild indicated and required) that includes information regarding an error in the Rec. or Rep. and/or Repro. Of the data and parity", is met by the combination mainly with Ng.

At col. 5, Ng, error for data and parity are logged or flagged for rebuilding, during recording or reproduction operations,

"Whenever the parity correction is unsuccessful, a subsystem error is flagged in a usual manner."; and

"a disk has failed ... a rebuild is indicated"; and

"Likewise, machine step 55 represents monitoring for a failed access, read operation or write operation in any one of the parity groups 13-15 or any access to a known failed drive.", and

"If a rebuild is required, then the later described opportunistic rebuild operations of machine step 57 are performed.", rebuilding at opportunistic times after being logged, wherein the logged or flagged or indicated failure is for any data including the parity, wherein the being audio and video {and the status thereof}, based on the combination, parity data for detection and correction, but, also the system rebuilds parity data if necessary (upon the status of it or the drives or the content), upon reading and writing data (content and parity) failures and drive (mechanical or other, non-data related, no data or time-outs too much time), failures associated with drives, having data and parity data.

Also, see col. 6, lines 64-, "When a disk drive is totally replaced, then the data from all of the remaining devices 20-24 are used to compute the data for the replaced disk.", which includes the parity data one or more disks, that will be rebuilt based on the remaining.

Also, col. 8, lines 46-, "For a striped mode array, since the track access mechanisms ...()... of the drives in each parity array always have a common radial position over disks 70 of respective devices 20-24 ...", therefore, upon a failed drive the data and parity are rebuilt or even just sections/areas of the drive or drives.

Art Unit: 2616

In an alternative interpretation in view of applicant's specification status can be defined as a failed condition based on more than one issues,

- page 22 of applicant's describes one condition being

"a timeout of communication", "this shows that status data has not been returned within a fixed time period" and "It is also decided on information obtained through the Ethernet 3 whether or not the RAID 2 has recovered".

Applicant states, page 9, Baba, that teaches, detecting a status or a response or data from a drive or status data, being data itself, based on wherein a faulty drive does not respond with the data, within a period of time {no data}, based on a time set in a timeout table, therefore detects by detecting status data or not, the status is based on a time out, thereby generating status data by the status of receiving or not, being an evaluation of time duration associated with data not received, for example.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to generate status based on a non-responsive drive or a non-responding drive, in recording as well as reproduction operations, with respect to time or a timeout period of not receiving data or being status or data, the status of the data and parity not received {a not received data or status, or an operation not accomplished, for example}, wherein the data, is content {A/V}, and associated parity type data, not received or not recorded or not reproduced, representing a status, thereby generating a status condition with respect to parity and content.

The examiner does not deem the amended claims to be distinguishable over the prior art, as now applied.

The examiner would appreciate an effort by applicant to identify areas of the specification including drawings showing and supporting the newly added claim language, in view of possible patentability based on newly added limitations or even existing limitations for, "clarity of record", when arguing or stating, and/or amending the claims to further narrow the scope of the claimed invention and also to identify areas {by cols., lines and possible drawings} of the prior art references, as briefly discussed herein.

Art Unit: 2616

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Fax Information


Any response to this action should be faxed to:

(571) 273-8300, for communication as intended for entry,
this Central Fax Number as of 7/15/05

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00 PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent
9/6/05


VINCENT BOCCIO
PRIMARY EXAMINER